

**ABSTRACT**

The invention relates to a method for manufacturing a cooling element (1) to be used in the structure of a furnace used in metal processes, such as a flash smelting furnace, a blast furnace, an electric furnace or other metallurgical reactor, said cooling element comprising a copper housing (2) made of one single piece, in which housing there is formed a channel system (3) for the circulation of the cooling medium, lining elements (4) made of fireproof material, said housing and lining element including means for connecting them together, and the lining element (4) and the housing (2) are connected so that the lining element (4) can move in the vertical direction with respect to the housing (2). The invention also relates to a cooling element.

Fig. 1